

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit:

3600

Serial No.:

09/821,563

Filters

Dean Rosales

§ § §

Examiner:

Wesley Tucker

Filed:

March 29, 2001

§ § §

For:

Providing Multiple Symmetrical

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Atty. Dkt. No.:

ITL.0536US

(P10841)

Mail Stop Appeal Brief Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

TRANSMITTAL OF SUPPLEMENTAL APPEAL BRIEF

Dear Sir:

In response to the Notification of Non-Compliant Appeal Brief mailed on May 15, 2007, attached hereto is a Supplemental Appeal Brief.

A new Summary of Claimed Subject Matter was added to map the claims as per current requirements. Also, in the Grounds of Rejection and Arguments sections, a typographical error was corrected to change "[claim] 39" to "[claim] 19". The Supplemental Appeal Brief is therefore believed to be in compliance.

No fee is believed to be due with this response. However, the Commissioner is authorized to charge any fee due to Deposit Account No. 20-1504 (ITL.0536US).

Respectfully submitted,

Date: May 31, 2007

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Date of Deposit: May 31, 2007

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginja 22313-1450.

Nancy Meshkoff



In re Applicant:

Dean Rosales

Art Unit:

2623

Serial No.:

09/821,563

Examiner:

Wesley J. Tucker

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March 29, 2001

Conf. No.:

5880

For:

Providing Multiple

Atty Docket: ITL.0536US

Symmetrical Filters

(P10841)

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SUPPLEMENTAL APPEAL BRIEF

This responds to the office action mailed May 15, 2007.

Date of Deposit: May 31, 2007

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Nancy Meshkoff

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REAL PARTY IN INTEREST

The real party in interest is the assignee Intel Corporation.

RELATED APPEALS AND INTERFERENCES

None.

STATUS OF CLAIMS

Claims 1-25 are rejected. Each rejection is appealed.

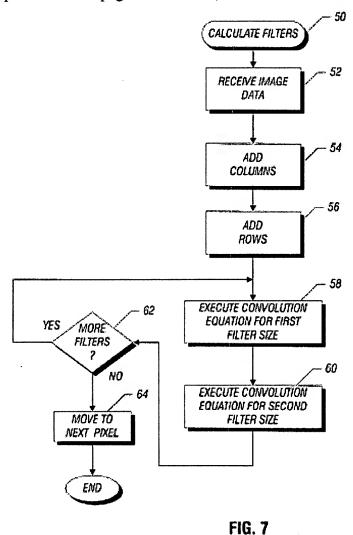
STATUS OF AMENDMENTS

All amendments have been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

In the following discussion, the independent claims are read on one of many possible embodiments without limiting the claims:

1. The method comprising:
receiving image data (Fig. 7, 52) (specification at page 14, lines 3-4); and
simultaneously determining at least two filters of different sizes from said data
(Figure 7, 58, 60) (specification at page 4, lines 6-11).



9. The method of claim 1 including simultaneously generating at least three filters of different sizes (specification at page 6, lines 9-18; page 9, lines 22-28).

11. An article comprising a medium storing instructions that enable a processor-based system to:

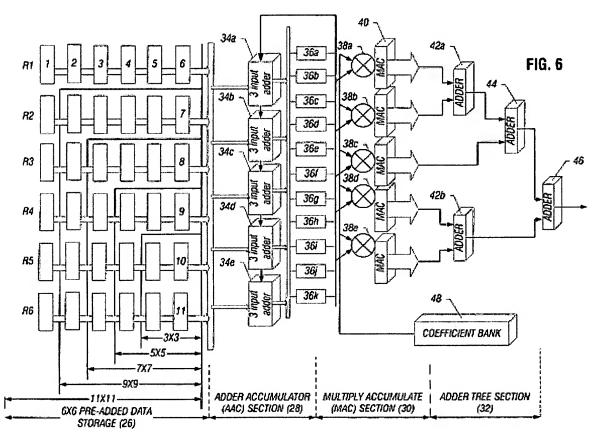
receive image data (Fig. 7, 52) (specification at page 14, lines 3-4); and simultaneously determine at least two filters of different sizes from said data (Figure 7, 58, 60) (specification at page 4, lines 6-11).

19. The article of claim 11 further storing instructions that enable the processor-based system to simultaneously generate at least three filters of different sizes (specification at page 6, lines 9-18; page 9, lines 22-28).

21. The system comprising:

a first set of adders (Figure 6, 34) to add together rows and to add together columns of image data (specification at page 10, lines 13-21); and

a second set of adders (Figure 6, 42) and a first set of multipliers (Figure 6, 38) to calculate at least two different filter sizes from said image data (specification at page 10, line 22 to page 11, line 2).



At this point, no issue has been raised that would suggest that the words in the claims have any meaning other than their ordinary meanings. Nothing in this section should be taken as an indication that any claim term has a meaning other than its ordinary meaning.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether the Disclosure Is Enabling of Claims 1, 9, 11, and 19 under 35 U.S.C. § 112, First Paragraph.
- B. Whether Claims 1, 4, 8-11, and 18-20 Are Anticipated under 35 U.S.C. § 102(b) by Park.

ARGUMENT

A. Is the Disclosure Enabling of Claims 1, 9, 11, and 19 under 35 U.S.C. § 112, First Paragraph?

Claim 1 calls for receiving image data and "simultaneously" determining at least two filters of different sizes from the data. In the Advisory Action, the Examiner states that he "agrees that the values calculated for the 3x3 filter are available in use for the 5x5 filter calculation." But the Examiner insists that the claim requires that the 5x5 filter be calculated entirely simultaneously with the 3x3 filer. Such an interpretation is wrong as a matter of law because it reads the word "entirely" into claim 1 before "simultaneously."

In other words, the Examiner agrees that at least a portion of the 3x3 and 5x5 filters are calculated at the same time. But he insists that to meet the claim limitations, they must all be calculated at the same time. However, this position is completely inconsistent with the claim language that says simply "simultaneously" determining at least two filters. Those filters are simultaneously calculated in part; just all of the filter values are not simultaneously calculated.

In paragraph 4 of the final rejection, it is indicated that the 5x5 filter is calculated using information obtained due to the prior calculation of the 3x3 filter. The Examiner then concludes that "therefore, the calculation of the 5x5 filter must take place some moment after the 3x3 filter calculation because the 3x3 calculation is referred to as prior. The Examiner contends that this is in direct contradiction of the conventional definition of simultaneous, which is taken to mean occurring at the same time.

But the calculation of the 5x5 filter does take place at the same time as the calculation of the 3x3 filter because the calculation of the 3x3 filter is part of the calculation of the 5x5 filter. Therefore, the 3x3 and 5x5, by the Examiner's own definition, are necessarily undertaken simultaneously.

B. Are Claims 1, 4, 8-11, and 18-20 Anticipated under 35 U.S.C. § 102(b) by Park?

As best it can be understood, it is argued that Park inherently does what is claimed. But there is no reason that Park inherently calculates the filters in the fashion claimed, namely simultaneously. See M.P.E.P. § 2112 (the allegedly inherent characteristic must necessarily flow from the teachings of the prior art). He could do them totally separately and serially. There is no

reason to presume that he overlapped the calculations in the way claimed. Therefore, Park's teaching cannot meet the claims inherently since there is nothing whatsoever in Park that suggests that the filters are calculated simultaneously, and there is no reason why this must necessarily be so.

* * *

Applicant respectfully requests that each of the final rejections be reversed and that the claims subject to this Appeal be allowed to issue.

Respectfully submitted,

Date: May 31, 2007

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CLAIMS APPENDIX

The claims on appeal are:

- The method comprising:
 receiving image data; and
 simultaneously determining at least two filters of different sizes from said data.
- 2. The method of claim 1 wherein receiving data includes receiving a matrix of data having rows and columns, and reducing the number of rows and reducing the number of columns.
- 3. The method of claim 2 including adding rows together and adding columns together.
- 4. The method of claim 1 including progressively calculating filters from smaller to larger sizes.
- 5. The method of claim 4 including receiving image data values, adding the values together, and multiplying the values by convolution coefficients.
- 6. The method of claim 5 including reusing the results of said additions and multiplications calculated for one filter size, when calculating a filter of a larger size.
- 7. The method of claim 1 including receiving data values in rows and columns, and adding together data values along diagonals.
- 8. The method of claim 1 including calculating at least two filters for a first pixel among said image data and then calculating a filter for an adjacent pixel.

- 9. The method of claim 1 including simultaneously generating at least three filters of different sizes.
- 10. The method of claim 1 including successively calculating filters of prograessivley larger size.
- 11. An article comprising a medium storing instructions that enable a processor-based system to:

 receive image data; and simultaneously determine at least two filters of different sizes from said data.
- 12. The article of claim 11 further storing instructions that enable the processor-based system to reduce the number of rows of image data and reduce the number of columns of image data.
- 13. The article of claim 12 further storing instructions that enable the processor-based system to ad values associated with rows together errand to add values associated with columns together.
- 14. The article of claim 11 further storing instructions that enable the processor-based system to progressively calculate filters from smaller to larger size.
- 15. The article of claim 14 further storing instructions that enable the processor-based system to receive image data values, add the values together, and multiply the values by convolution coefficients.
- 16. The article of claim 15 further storing instructions enable the processor-based system to reuse the results of said additions and multiplications calculated for one filter size, when calculating a filter of a larger size.

- 17. The article of claim 11 further storing instructions that enable the processor-based system to receive data values in rows and columns, and add together data values along diagonals.
- 18. The article of claim 11 further storing instructions that enable the processor-based system to calculate at least two filters for a first pixel among said image data and then calculate a filter for an adjacent pixel.
- 19. The article of claim 11 further storing instructions that enable the processor-based system to simultaneously generate at least three filters of different sizes.
- 20. The article of claim 11 further storing instructions that enable the processor-based system to successively calculate filters of progressively larger size.
 - 21. The system comprising:

a first set of adders to add together rows and to add together columns of image data; and

a second set of adders and a first set of multipliers to calculate at least two different filter sizes from said image data.

- 22. The system of claim 21 that progressively calculates filters from smaller to larger sizes.
- 23. The system of claim 22 that utilizes the results from said second set of adders and first set of multipliers for one filter size, when calculating a filter of a larger size.
- 24. The system of claim 21 including a state machine that control the operation of said first and second adders and said first set of multipliers.
- 25. The system of claim 21 wherein said second set of adders adds image data along diagonals.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.